SPECIFICATION

Please amend the second full paragraph beginning on page 2 of the Specification (page 2, lines 26-31) as follows:

Regularisation methods, such as the break-off regularisation of the singular value decomposition, usually are non-intuitive, and usually also have to be solved for each case specifically. A regularisation of the wrong type may lead to an erroneous modelling result.

Please amend the last paragraph beginning on page 2 of the Specification (page 2, line 32 to page 3, line 2) as follows:

Therefore, source modelling nowadays still involves problems such as the ~~hardness~~ difficulty and slowness of the computation, the possible errors caused by noise, as well as the case-specificity due to the regularisation. Furthermore, as stated above, the regularisation may cause ~~considerably~~ considerable errors to the final computation result.

Please amend the last paragraph beginning on page 3 of the Specification (page 3, line 26 to page 4, line 14) as follows:

The basic idea of the invention is that because the computation of the inner products of the sensor fields is hard and difficult using a conventional set of sensors, it is worth using a special set of sensors, whose switching fields are orthogonal and, if possible, [[to be]] analytically computed. In principle, this can be implemented by a suitable physical set of sensors. As a suitable physical set of sensors is, however, often quite difficult to manufacture, it is, in most cases, advantageous to use virtual sensors computationally generated from a conventional set of sensors, i.e. the measurement signals are converted into other ones by a suitable conversion so that they correspond to the signals that the virtual measurement device would have measured. At the same time, it is possible, if necessary, to eliminate the signals associated with external interference. This conversion has been described, for example, [[e.g.]] in patent application FI20030392, which is incorporated herein by reference. After the conversion, the source modelling is performed in an optimal manner using the basis vector components of the signal space instead of the actual measurement signals. One substantial feature of the invention is that after the conversion, the source model need not be any more regularised.